Syllabus for Fall 2014 offering of
CSCI 459/CSIS 659 – Service-Oriented Computing
Thursdays, 6 – 8:45pm

Instructor

Dr. Paul Buhler, Visiting Associate Professor
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Office hours: Tuesday/Thursday 10 – 12pm, 3 – 4:30pm, other times by appointment, email responses within 24 hrs.

Catalog Description

This course explores both Service-Oriented Architecture (SOA) and Business Process Management (BPM) enterprise software layers. Students will learn how business and IT concerns can be aligned. Students gain experience with service-oriented software development, process modeling and execution, and securing services.

Course Goals

I have three primary topical objectives for this course. Each topic will be taught with a What, Why, How approach. The three topical areas are:

- The major tenants of Service-Oriented Architecture. You will have the opportunity to use industry tools to create/deploy/call Web services, which provide the predominant platform for realizing SOA (Java)
- Composition of Web services into a meaningful process via BPMN and a process engine (Whitestein LSPS)
  Application = Computation + Coordination
- Explore issues of securing Web services with WS-Security; exposure to XML Signature and XML Encryption will be obtained

Textbooks

SOA with Java: Realizing Service-Orientation with Java Technologies, by Erl, et al. ISBN: 0-13-385903-7

Electronic Resources

This course has an online support area, which is to be used for discussions, assignments, and electronic file distribution. The URL is http://groups.yahoo.com/group/csci459csis659fall2014- please join ASAP.

Evaluation

60% Tests (2, a mid-term and final)
40% Programming/Homework Assignments (5-6 in number)

Letter grades will be determined on the following scale:
A: 100 – 90, B: 89 – 80, C: 79 – 75, F: 74 – 0

Assignments

Assignments will include regular reading of material from the text, as well as class handouts. There will be approximately 4 programming assignments, which are to be done individually, without collaboration, unless specifically permitted in the assignment instructions.

Important: source code and algorithms obtained from the Internet or other resources must be acknowledged.

All suspected violations of the honor code, will be referred to the honor board.